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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 6,992,628
Appln. No. : 10/647,677 Confirmation No. : 3291
First Named Inventor: RAWNICK
Filed : Aug. 25, 2003
TC/A.U. : 2821
Examiner : CAO, Huedung X.

Docket : 7162-0082
Customer No. : 39207

TRANSMITTAL LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attn: Certificate of Correction Branch


Certificate
OCT 05 2006
of Correction

Please find enclosed for filing:

- ✓ Request for Certificate of Correction
- ✓ Form PTO/SB44 in duplicate
- ✓ Copy of Notice of Allowance
- ✓ Copy of Examiner's Statement of Reasons for Allowance
- ✓ Other: Postcard Receipt
- ✓ Please charge any deficiencies or credit any overpayments to Deposit Acct. No. 08-0870.

Respectfully submitted,

9-29-06
Date


Robert J. Sacco
Registration No. 35,667
Sacco & Associates, P.A.
P.O. Box 30999
Palm Beach Gardens, FL 33420-0999
Tel: 561-626-2222

Certificate Under 37 C.F.R. 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

9-29-06 Typed name of person signing this certificate: ROBERT J. SACCO



OCT 10 2006



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REQUEST FOR CERTIFICATION OF CORRECTION
UNDER RULE 37 C.F.R. §1.322

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attn: Certificate of Correction Branch

Sir:

The undersigned, on behalf of Applicant, respectfully requests that a Certificate of Correction be issued on the above-identified patent. The requested correction is indicated in appropriate form on attached form PTO/SB/44, submitted in duplicate. The errors are apparent from a comparison of the file of the application and the issued patent. The errors are as follows:

Column 9

Line 5, insert --a-- between "distributing" and "fluid"

Certificate Under 37 C.F.R. 1.8(a)

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9-29-06 Typed name of person signing this certificate: ROBERT J. SACCO

OCT 10 2006

Column 10,

Line 41, insert the following allowed claims:

17. The antenna according to claim 9 wherein said fluid control system comprises a controller and said controller selectively varies said volume to cause said at least one antenna element to be resonant at said plurality of operating bands.
18. The antenna according to claim 9 wherein said fluid dielectric is comprised of magnetic particles.
19. The antenna according to claim 9 wherein said fluid control system comprises a controller and said controller selectively varies at least one of a capacitive and a magnetic loading of said at least one antenna element.


REMARKS

A copy of the Notice of Allowability and Examiner's Statement of Reasons for Allowance are also enclosed herewith. Applicant notes that on the Notice of Allowability the allowed claims are identified as 1-3 and 5-17. However, on the Examiner's Statement of Reasons for Allowance, claims 1-3 and 5-20 are allowed. Applicant respectfully submits that original claims 18-20 (newly numbered as claims 17-19) were omitted in error by the Office. Accordingly, it is respectfully requested that the Commissioner issue a Certificate of Correction under Rule 322.

No fee is due under this Request. However, please charge any deficiencies or credit any overpayments to Deposit Acct. No. 08-0870.

Respectfully submitted,

9-29-06
Date


Robert J. Sacco
Registration No. 35,667
Sacco & Associates, P.A.
P.O. Box 30999
Palm Beach Gardens, FL 33420-0999
Tel: 561-626-2222

OCT 10 2006

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 6,992,628

APPLICATION NO.: 10/647,677

ISSUE DATE : Jan. 31, 2006

INVENTOR(S) : RAWNICK, et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 9

Line 5, insert --a-- between "distributing" and "fluid"

Column 10,

Line 41, insert the following claims:

17. The antenna according to claim 9 wherein said fluid control system comprises a controller and said controller selectively varies said volume to cause said at least one antenna element to be resonant at said plurality of operating bands.

18. The antenna according to claim 9 wherein said fluid dielectric is comprised of magnetic particles.

19. The antenna according to claim 9 wherein said fluid control system comprises a controller and said controller selectively varies at least one of a capacitive and a magnetic loading of said at least one antenna element.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

SACCO & ASSOCIATES, P.A.

P.O. BOX 30999

PALM BEACH GARDENS, FL 33420-0999

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DEC 1 0 2006

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

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APPLICATION NO.: 10/647,677

ISSUE DATE : Jan. 31, 2006

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JUN 10 2006



Notice of Allowability

Application No.

10/647,677

Examiner

Huedung X. Cao

Applicant(s)

RAWNICK ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AMENDMENT, FILED ON 03/25/05.
2. ☒ The allowed claim(s) is/are 1-3 and 5-17.
3. ☒ The drawings filed on 25 August 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 05/23/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Don Wong
Supervisory Patent Examiner
Technology Center 2800

OCT 10 2006



Application/Control Number: 10/647,677

Page 2

Examiner's Statement of Reasons for Allowance

1. Claims 1-3, and 5-20 are allowed.

2. The following is an examiner's statement of reasons for allowance:

The prior art made of record fails to anticipate or make obvious the claimed invention. Specifically, the prior art fails to teach, in combination with the remaining elements as recited in claims 1, 2, 7, 10, 16, and 17:

The present invention is directed to a method for varying an operating band of an antenna.

Regarding claims 1, 7, 10, 16, and 17 Prior Art fail to specifically teach that a fluid dielectric comprising magnetic particle, and varying a volume of said fluid dielectric coupled to said at least one antenna element to selectively maximize efficiency of said antenna element on a plurality of operating bands.

Claims 3, 5-6 are allowed for depending on claim 1.

Claims 8-15, and 18-20 are allowed for depending on claim 7.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

OCT 10 2006

Art Unit: 2821

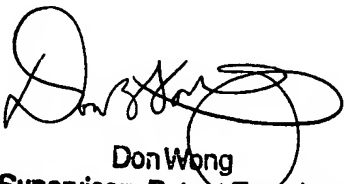
Inquiries

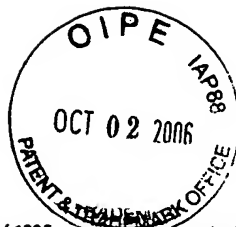
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Cao whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Cao
Patent Examiner


Don Wong
Supervisory Patent Examiner
Technology Center 2800



Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

(Use as many sheets as necessary)

Sheet	1	of	3
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Complete if Known

Application Number	10/647,677
Filing Date	Aug. 25, 2003
First Named Inventor	Rawnick
Art Unit	2821
Examiner Name	CAO, Heudung X.
Attorney Docket Number	7162-0082

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	1 st
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)	MM-DD-YYYY			
HC		JP 2000307362	11/02/2000	mitsubishi elec		
		JP 10/190321	07/21/1998	NEC CORP		
		JP 56-123102	09/28/1981	mitsubishi elec		
		JP 05-211402	08/20/1983	FURUKAWA ELEC		
		JP 07-015218	01/17/1995	FUJI ELEC		
HC		JP 08-154006	06/11/1996	MURATA MFG		

Examiner Signature		Date Considered	6/7/05
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	3
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U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ² Number* Kind Code ³ (if known)				
HC		WO 01-01453 A2	01/04/2001	SUN MICROSYS		
I		EP 1 108 533	06/20/2001	KONICA CORP		
I		EP 0 754 660 A1	01/22/1997	TDK CORP		
		EP 1 089 374 A2	04/04/2001	KABUSHIKI KAISH		
HC		JP 08 307117	11/22/1996	TASIE		

**Examiner
Signature**

Date Considered

6/7/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

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Examiner Name	CAO, Heudung X.
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Sheet 3 of 3

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
HC		ITOH, T.; et al: "Metamaterials Structures, Phenomena and Applications" IEEE Transactions on Microwave Theory and Techniques; April, 2005; [Online] Retrieved from the Internet: URL:www.mtt.org/publications/Transactions/CFP_Metamaterials.pdf>	
HC		KIZILTAS, G.; et al: "Metamaterial design via the density method" IEEE Antennas and Propagation Society Int'l Symposium 2002, vol. 1, 16 June 2002 pp 748-751, Piscataway	
HC		SALAHUN, E.; et al: "Ferromagnetic composite-based and magnetically-tunable microwave devices" IEEE MTT-S Microwave Symposium Digest, Vol. 2, 2 Jun 2002 pp1185-1188	

Examiner Signature		Date Considered	6/7/05
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